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ABSTRACT

A 1977 national survey of 216 television stations that use electronic news gathering (ENG) and of 224 stations that still use only film for camera reporting showed little difference in the types of news the two kinds of operations covered, although stations using ENG shot more stories than did those still using only film. The persons making editorial decisions in ENG were typically the same ones that made such decisions for film. Reporters, producers, and photographers seemed to adapt well to ENG, but engineers at a number of stations were reported to have problems using the new equipment. Nine tables of data are included. (Author/RL)

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A SURVEY OF ELECTRONIC NEWS GATHERING AND TELEVISION NEWS COVERAGE

Vernon A. Stone and John P. DiCioccio

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Vernon A. Stone
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TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

A paper presented to the Broadcast Journalism Division of the Association for Education in Journalism at the annual AEJ convention, at the University of Wisconsin, Madison, on August 22, 1977. Dr. Stone is a professor in the School of Journalism and Mass Communication at the University of Georgia, where Mr. DiCioccio was a graduate student at the time of the study. The research was conducted as a project of the Radio Television News Directors Association, for which Dr. Stone is Research Committee chairman. Graduate students Anne P. Bowers and Fred O. Smith assisted with data processing.

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How is electronic news gathering (ENG) changing television news? With more than half of the commercial television stations in the United States now using ENG and three-fourths expected to be into ENG by the end of 1977,[1] it is generally assumed that great changes in the content of TV news are taking place or can be expected.[2]

Most articles on the subject have been anecdotal and have concentrated on spectacular instances of "live" coverage by networks or stations in major markets.[3] Little attention has been given the use of ENG by rank and file stations around the country, and generalizable survey data have been lacking. The first such survey showed two quite different types of ENG stations in 1976: 1) major-market operations adding ENG primarily to "go live" and 2) smaller-market stations, seldom with live capability but adding ENG to economize with reusable tape in place of newsfilm.[4]

Tape's reusability could encourage the shooting of more different stories from which a newscast editor or producer might choose. It thus might be expected:

--That ENG would mean more stories shot in ratio to those used than is the case with newsfilm.

Nationally televised live ENG coverage of shootouts, hostage situations and such have led to the expectation:

--That live ENG is related to increased spot news coverage, particularly of crime, accidents, fires, etc.[5]

Various observers, in the above articles and elsewhere, have also expressed concern that:

--ENG may bring a shift of editorial control from journalists to technicians.

--Viewers may see regular programs interrupted quite often for live news feeds.

--Reporters may have trouble adapting to "talking on their feet" for live ENG.

These and other questions are addressed in the present study, a 1977 survey conducted for the Radio Television News Directors Association as a follow-up to the RTNDA survey by Stone in 1976.[6]

METHOD

In January 1977, a four-page questionnaire was mailed to 216 commercial TV stations which had reported in the 1976 survey that they were using ENG or planned to be doing so by the end of the year, or which were known from other sources to be using ENG. A separate three-page questionnaire, consisting largely of items parallel to those in the ENG instrument, was mailed to the 224 respondents in the 1976 survey who indicated that they would still not be using ENG by the end of that year. A second mailing went to non-respondents in late February.

The response rate was 60 per cent, with 148 usable questionnaires returned by stations using ENG and 110 from those with newsfilm only. Five stations reported that they were using neither ENG nor newsfilm.

RESULTS

ENG growth rate. Television stations were found to be adding ENG at a somewhat faster rate than indicated in the 1976 survey. Several news directors who were mailed newsfilm questionnaires in early 1977 returned them with notes that they were then using ENG. A few said that they had gotten into ENG several weeks earlier than expected.

At the time of the survey in early 1977, ENG was in use at an estimated 60 per cent of the 644 non-satellite commercial television stations in the United States. This projects to 386 stations. The estimate was computed by using data from both the 1977 survey and the one by Stone in 1976.[8]

Forty-four per cent -- a projected 114 -- of the non-users were planning to add ENG during 1977, bringing the total using ENG to about 500 -- or 78 per cent of all commercial TV news operations -- by the end of this year.

Of the relatively few stations to remain without ENG after 1977, about 16 per cent (41 stations) planned to add ENG in 1978 and 18 per cent (46) later. Only 21 per cent of the non-users in the sample said they had no plans for ENG. This projects to 54 commercial stations, 9 per cent of the U.S. total. The figure was 12 per cent (projecting to 77 stations) in the 1976 survey. The change indicates that even stations with no present plans for ENG may come up with such plans later.

Few television markets are now without at least one ENG station. Only 11 per cent of the survey respondents were in non-ENG markets, and these were mostly in the bottom-100. One-fourth of the respondents in ADI markets 101-206 were at stations where they and their competitors had only newsfilm. But only 2 per cent of the respondents in the top-50 markets and 5 per cent of those in ADI markets 51-100 were in markets without at least one ENG operation.

Most markets had one, two or three ENG stations. Markets with only one) were reported by 24 per cent of the respondents, two ENG stations by 30 per cent and three by 22 per cent. Four or more ENG operations were reported by 14 per cent of the news directors, mostly in major markets.

The larger the market, the harder it is to compete without ENG. News directors at non-ENG stations in ENG markets were asked if the other stations' ENG was putting their news at a competitive disadvantage. Yes was the answer from four

out of every five non-ENG respondents in the top-50 markets, from just over half of those in ADI markets 51-100, and from about a third of the stations without ENG in smaller markets. The more likely were ENG competitors to have live capability, the more likely were those without ENG to feel handicapped in their efforts to compete.

ENG vs. newsfilm. The great majority of stations using ENG in early 1977 were also still using newsfilm. As Table 1 shows, half said that as much of their film coverage was by film as by ENG. About a fifth were all-ENG.

The larger the market, the greater the prominence of film at stations adding ENG. Operations in the top 50 markets in particular were usually able financially to maintain both ENG and film operations, and many news directors were finding that they still preferred film for certain kinds of coverage. But in markets below 100 in rank, it tended to be one or the other -- ENG or film. These smaller operations tend to phase out film as soon as possible when going to ENG because of the expense of maintaining both systems. Indeed, most of the all-ENG operations were found in smaller markets, and these used tape-only ENG, with no live feeds.

Forty-six per cent of the ENG stations said they had live capability, but relatively few were using this heavily. (Table 2) Stations in the top 50 markets averaged about five live feeds a week, those in the next 50 went live about three times a week, and smaller-market stations were not yet geared for live ENG transmission.

Number of stories. Stations with ENG were shooting more stories than those with only newsfilm. This was the case in all market categories. As shown in Table 2, in the top 50 markets, ENG stations were averaging 84 stories per week compared to 63 for stations using only newsfilm. In markets 51-100, ENG stations reported 68 per week and non-ENG stations had 59. In smaller markets, the

TABLE 1

Responses by ENG Users to "About how much of your field coverage is ENG as against film?" by Market Size

	Market size			
ENG portion of field coverage	ADI 1-50	51-100	101 & up	All markets
1-25%	39%	19%	0%	23%
26-50%	34	26	12	26
51-99%	22	40	42	33
100%	5	15	46	18
	100%	100%	100%	100%
Number of cases	62	46	33	141

TABLE 2

Mean ENG Stories and Film Stories Weekly, by Overall Kinds of Operations and ADI Market Size

	Method of shooting				
Kind of operation & ADI market ranks	Live ENG	Tape ENG	(Total ENG)	News-film	Methods combined
ENG					
1-50 (N = 47)	4.9	29.8	(34.7)	49.8	84.5
51-100 (N = 42)	2.6	38.0	(40.6)	27.8	68.4
101 & up (N = 32)	0	34.4	(34.4)	10.3	44.7
Newsfilm-only					
1-50 (N=32)	--	--	--	63.0	63.0
51-100 (N = 35)	--	--	--	58.7	58.7
101 & up (N = 51)	--	--	--	38.6	38.6

average was 45 weekly for ENG stations and 39 for newsfilm-only stations. Table 2 also shows again that the larger the market, the greater the number of newsfilm stories shot by ENG stations.

Use ratio. No support was found for the suggestion that, because tape is reusable, ENG stations would shoot more stories to hold in second-string reserve but often not to use. Regardless of the type of camera used, most stories shot at the station level are used. Ninety-five per cent of the newsfilm stories being shot in early 1977 were being used. And despite the reusability of tape, roughly the same ratio (96 per cent) of stories-used to stories-shot was reported for ENG tape coverage.

ENG and spot news. ENG stations were carrying more spot news stories (and other kinds) than stations with only newsfilm. (Table 3) Newsfilm-only stations averaged about four less spot news stories than tape-only ENG stations each week and carried only about half as many spot stories as did live ENG stations. Two of every five stories covered by live ENG were spot news.

However, there was little difference between the proportions of spot news stories carried by ENG and newsfilm-only stations. At live ENG stations, with tape ENG and film stories added to live feeds, total spot news accounted for about a third of all stories. This is nearly the same as for stations with newsfilm-only -- 30 per cent of their stories being spot news. Those few stations using only tape ENG and no newsfilm averaged 45 per cent spot news stories. When the three types of ENG operations are combined, their spot news stories average 32 per cent of all stories carried, which is roughly the same as for newsfilm-only stations.

Other types of stories. Live ENG was being used as often for scheduled events as for spot news, but seldom for features or other stories.

TABLE 3

Mean Stories Weekly by Types, Shot by ENG or Film, in Kinds of Operations

Kind of operation & Type of story	Method of shooting: Live ENG		Tape ENG		Newsfilm		Total	
Live ENG + film								
Spot news	1.6	40%	9.6	32%	14.8	33%	26.0	33%
Scheduled events	1.8	44	13.2	43	16.0	35	31.0	39
Features	.5	12	5.0	16	9.3	20	14.8	18
Other	.2	4	2.6	9	5.3	12	8.1	10
Total (N = 53)	4.1	100%	30.4	100%	45.4	100%	79.9	100%
Tape-only ENG + film								
Spot news	--	--	7.9	24%	9.9	35%	17.8	29%
Scheduled events	--	--	15.1	45	11.3	40	26.4	43
Features	--	--	7.9	24	5.8	20	13.7	22
Other	--	--	2.3	7	1.4	5	3.7	6
Total (N = 49)	--	--	33.2	100%	28.4	100%	61.6	100%
Tape-only ENG (& no film)								
Spot news	--	--	17.5	45%	--	--	17.5	45%
Scheduled events	--	--	11.6	30	--	--	11.6	30
Features	--	--	6.5	17	--	--	6.5	17
Other	--	--	3.4	9	--	--	3.4	9
Total (N = 19)	--	--	39.0	101%	--	--	39.0	101%
Newsfilm-only								
Spot news	--	--	--	--	13.9	30%	13.9	30%
Scheduled events	--	--	--	--	18.1	39	18.1	39
Features	--	--	--	--	10.3	22	10.3	22
Other	--	--	--	--	4.2	9	4.2	9
Total (N = 109)	--	--	--	--	46.5	100%	46.5	100%

Across types of operations, spot news and scheduled events each tended to account for about a third of the stories carried, with features numbering about a fifth of the camera-covered stories.

Story topics. Only marginal support was found for the expectation that live ENG would be associated with a higher proportion of stories on crimes, accidents, fires and other police-call news than would other methods of camera reporting. Table 4 shows that live ENG was generally used to cover such stories at a slightly higher rate than tape ENG or film, but the differences were small. Overall, for each type of operation, about a fifth of all stories were of this kind.

The greatest use of live ENG was for government-related news. Across operations, news related to government accounted for just over a fourth of all stories.

A fifth of the stories concerned education and other community services, with little difference by types of operation.

A sixth of all stories used were in the human interest category, again with ENG and newsfilm operations using them at about the same rate.

Hard vs. soft news. News directors were asked to categorize the number of ENG and film stories used in the preceding seven days according to how many were "hard news" and how many "soft news."

As Table 5 details, stations with ENG differed only slightly from those with only newsfilm in the proportion of hard news stories. Hard news accounted for 68 per cent of the stories used by ENG stations combined and 65 per cent of the stories at newsfilm-only stations.

Most live ENG feeds -- four of every five -- were classified as hard news by the news directors.

Methods most likely used. News directors with a choice of methods were asked which they would most likely use for camera coverage of various situations. For live ENG stations, the choice was threefold -- live ENG, tape ENG or film.

TABLE 4

Mean Stories Weekly by Topics, Shot by ENG or Film, in Kinds of Operations

Kind of operation & Type of story	Method of shooting: Live ENG		Tape ENG		Newsfilm		Total	
Live ENG + film (N = 48)								
Government-related	1.4	35%	9.3	29%	9.3	21%	20.0	25%
Education, services	.6	17	7.5	24	10.1	23	18 2	23
Crime, accidents, etc.	1.0	27	6.7	21	9.8	22	17.5	22
Human interest	.6	15	4.7	15	8.0	18	13.3	17
Other	.2	6	3.7	12	6.6	15	10.5	13
Tape-only ENG + film (N = 45)								
Government-related	--	--	9.6	28%	7.0	25%	16.6	27%
Education, services	--	--	7.5	22	7.1	25	14.6	23
Crime, accidents, etc.	--	--	6.2	18	7.3	26	13.5	22
Human interest	--	--	6.8	20	5.1	18	11.9	19
Other	--	--	3.8	11	1.9	7	5.7	9
Tape-only ENG (& no film) (N = 18)								
Government-related	--	--	11.8	31%	--	--	11.8	31%
Education, services	--	--	6.1	16	--	--	6.1	16
Crime, accidents, etc.	--	--	6.9	18	--	--	6.9	18
Human interest	--	--	6.6	17	--	--	6.6	17
Other	--	--	6.7	18	--	--	6.7	18
Newsfilm-only (N = 108)								
Government-related	--	--	--	--	12.8	27%	12.8	27%
Education, services	--	--	--	--	9.6	21	9.6	21
Crime, accidents, etc.	--	--	--	--	9.9	21	9.9	21
Human interest	--	--	--	--	8.4	18	8.4	18
Other	--	--	--	--	6.0	13	6.0	13

TABLE 5

Hard News Percentages of Stories Used Weekly, Shot by ENG or Film

	Method of shooting			
Kind of operation	Live ENG	Tape ENG	Newsfilm	Total
Live ENG + film	80%	72%	67%	70%
Tape-only ENG + film	--	64%	67%	65%
Tape-only ENG (& no film)	--	71%	--	71%
Newsfilm-only	--	--	65%	65%

Table 6 shows that nearly all would use live ENG on major spot news, with 10 per cent supplementing or backstopping live cameras with film. Reusable ENG tape was the choice for minor spot events, scheduled events and hard news features. Tape and film were roughly a toss-up for soft features and documentary programs. Tape, with its reusability, was an overwhelming first choice for visually bland scheduled events such as speeches and news conferences.

In operations with a choice only between tape ENG and film, tape was the clear choice for major spot news, scheduled events, features and documentaries. Film was favored slightly over tape for minor spot news.

Program interruptions. The great majority of stations with live ENG were seldom using it to interrupt regular programs. Two-thirds were doing this less than once a week, rarely or never. Thirty per cent reported interrupting regular TV programs for live ENG feeds once or twice a week. Only one news director out of 56 responding to this item said his station cut in on programs with live ENG as often as three to five times a week.

Who normally makes the decisions to interrupt a program for a live feed? The news director does at 81 per cent of the responding stations. An assignment editor, producer or other person was listed by the other 19 per cent.

Who's in charge? For ENG, as for newsfilm, journalists rather than technicians were found to be the persons assigning the stories and calling the shots for field coverage and editing.

More than half of the ENG operations -- and the newsfilm operations -- were supervised by an assignment editor, sometimes teamed with another person. (Table 7) The news director was the person normally supervising 29 per cent of the ENG operations and 45 per cent of the newsfilm-only operations. The smaller the market, the more likely was the news director to be in direct charge of camera coverage. Although the term has been widely used in trade publications,

TABLE 6

Methods of Shooting Which News Directors at Live-ENG Stations Said Would Most Likely Be Used, by Subjects of Shooting

	Method of shooting					
Subject	Live ENG	Live ENG + film	ENG tape only	ENG tape + film	Film only	
Major spot news	86%	10	5	0	0	101%
Minor spot news	3%	3	48	21	25	100%
Visually active scheduled events	24%	10	42	11	13	100%
Visually bland scheduled events	3%	5	71	15	7	101%
Hard news features	3%	6	43	14	33	99%
Soft news features	2%	6	40	14	38	100%
Documentary programs	0%	0	46	13	41	100%

TABLE 7

Responses to: "Who normally supervises ENG (or newsfilm) coverage?"

	ENG	Newsfilm
Assignment editor only	31%	34%
Assignment editor plus any other	24	17
News director	29	45
Electronic news (or newsfilm) coordinator	6	1
Other	9	3
	99%	100%
Number of cases	143	108

an "electronic news coordinator" was supervising the overall ENG operation at only 6 per cent of the stations, and most of these had live ENG.

Are the responsibilities of the person in charge of the camera-reporting operation primarily journalistic or technical? Again, here was little difference between ENG and newsfilm stations. "Journalistic" was checked by 85 per cent of the ENG respondents and 87 per cent of those at stations with only newsfilm. Eleven per cent of the ENG respondents and 8 per cent of those for newsfilm-only checked both "journalistic" and "technical."

Who makes key editorial decisions in field coverage? It's the same person for ENG as for newsfilm. The "reporter" was checked by 83 per cent of the ENG and 80 per cent of the newsfilm respondents. A "producer" made key editorial decisions in the field at 13 per cent of the ENG but only 2 per cent of the newsfilm operations. At only two of 143 ENG stations providing information, was it "someone back at the station." The advent of an "electronic news coordinator" sitting in a "Star Wars" control center at the station and calling the shots for electronic news coverage in the field has not arrived, at least not on any regular basis for rank and file television stations.

ENG editing is somewhat more likely to be done by an editing specialist than is newsfilm editing. (Table 8) While camerapersons were editing ENG at more than a third of the stations, and so were reporters, the proportions for both were lower than in newsfilm operations. For ENG, a special editor or other person did the job in a third of the cases, compared to 15 per cent for newsfilm.

Adapting to ENG. The switch to a new technology has generally gone well for reporters, producers and photographers. But responses summarized in Table 9 indicate some rough spots for engineers. News directors at only about a third of the ENG stations said their engineers had adapted "very well," compared to upward of two-thirds for reporters, producers and photographers.

TABLE 8

Responses to: "Who normally does the editing?"

	ENG	Newsfilm
Cameraperson	37%	58%
Reporter	38	46
Special editor	21	6
Other	15	7
	110%*	117%*
Number of cases	138	105

*Multiple responses were accepted.

TABLE 9

How Well News Directors Say Types of Personnel Have Adapted to ENG

	Very well	Fairly well	Not well		N
Reporters	62%	38	0	100%	138
Producers	69%	31	0	100%	109
Photographers	62%	36	2	100%	135
Engineers	35%	44	21	100%	130

In live ENG operations, the most challenging for reporters, they were rated as adapting "very well" at half of the stations and "fairly well" at the other half.

What happens to newsfilm photographers when a station goes ENG? In most cases, they go electronic too. When news directors were asked where they had gotten most of their ENG camerapersons, 92 per cent checked "film photographers." Only 10 per cent checked "studio camerapersons," and 7 per cent said most were specially trained ENG camera operators. (Multiple responses were accepted.)

When asked what change had been most difficult for their staffs in going to ENG, 49 per cent of the respondents gave answers regarding the use and maintenance of equipment. Fifteen per cent said that adapting to ENG editing had been the top problem. Reporters adapting to live feeds was the most difficult change at only 8 per cent of the live ENG operations. Most reporters apparently are learning to "go live" with their voice reports, at least to the satisfaction of their news directors.

DISCUSSION

In general, the results show more similarities than differences in news coverage by television stations which have added ENG and those still using only newsfilm. The new technology appears to be serving essentially the same purpose as the older form which it is said to be replacing. The change in technology may be radical, but not the change in news coverage.

Although live ENG has been heralded as bringing the sights and sounds of spot news to the viewer while the events are in progress, and has done so in a number of notable instances, live ENG at most stations was found to be adding relatively little to the number of spot events covered. Furthermore, it was as likely to be used for scheduled events as for spot news.

Live ENG has not been restricted to making the viewer a witness of shoot-outs, fires and other police news. Indeed, it was found to be used more often to bring the public live reports of government-related news. The news directors described most of the stories being fed in live by microwave as hard news, not soft.

It is significant that stations which had added ENG were covering more stories than those which were newsfilm-only. That was the case in large, medium and small markets. Although the most readily suggested inference is that adding ENG causes more stories to be covered, another possible factor must be considered. ENG stations may tend to be the pacesetters, the leaders in their markets, and they may have been covering more stories than their competitors even before ENG. That explanation was not tested by this study.

Another limitation of this study is that it concerns only the number of stories, not their length either in unedited or edited form. Questions on story length and the amount of time given various categories of news coverage would best be addressed by content analysis. To ask news directors to calculate this in a mail survey would be too much of an imposition. The questionnaire used in the present study was already more demanding of a respondent's time than is desirable.

The low rate of interruption of regular programs by ENG feeds is not surprising. A news director too fascinated with ENG's live capability would soon learn from angry phone calls not to interrupt regular programming except for the most pressing reason.

Electronic news gathering equipment is new, but the persons making the decisions as to its use are typically the same ones calling the shots for newsfilm. An assignment editor supervises the overall operation, the reporter

makes the important editorial decisions in the field, and the most likely ENG editors are the same as for newsfilm -- the cameraperson and the reporter. Even the faces behind the portable electronic cameras are the same -- in most cases those of former newsfilm photographers who are now learning to use new tools.

It could be argued that there is a lag between the potential of ENG and the ability or readiness of station personnel to utilize that potential. After all, television news went for years as little more than illustrated radio news. Similarly, early radio news undertook to be a "newspaper" of the air.[9] Journalists tend to move slowly from their traditional ways, and many now working with ENG may be using electronic gear essentially to shoot and edit "newsfilm."

Such, however, would be only speculation at this point. The present study is an early one in a mushrooming area, and future research may show changes not indicated by the 1977 data.

On the other hand, in a few years, when the impact of ENG can be better assessed, we may find further support for that old observation by Mitchell Charnley: "News...is news, and reporting -- through any medium -- is reporting."[10]

FOOTNOTES

1. Vernon A. Stone, "ENG and Newsfilm Use Surveyed," RTNDA Communicator, April 1977, pp. 7-10.

2. Ron Whittaker, "ENG: TV News Will Never Be the Same Again," Broadcast Engineering, Jan. 1977, pp. 22-30.

3. For example: Phillip O. Kierstead, "ENG 'Live" News from Almost Anywhere," Quill, May 1976, pp. 25-29; "Moving into High Gear with ENG," Broadcasting, Aug. 23, 1976, pp. 26-30.

4. Stone, op. cit.

5. For example: Joe Saltzman, "It's Live --," TV Guide, March 15, 1975, pp. 6-10; "Local Television's Best Foot Forward," Broadcasting, Jan. 5, 1976, pp. 82-88; Betsy Carter, "The Minicam Revolution," Newsweek, July 19, 1976, p. 57.

6. Stone, op. cit.

7. The time-consuming nature of the questionnaire probably militated against responses. In order to obtain the information needed, we asked for a listing of the number of stories of various kinds shot by different methods and used during the preceding seven days, along with detailed equipment information for a separate technically-oriented study. Several news directors noted that the survey took a lot of time. Particularly in view of this, the response rate is considered good.

8. Stone, op. cit.

9. For a discussion of such tendencies in new technologies, see: Mitchell V. Charnley, "The Channels of News," pp. 74-90 in Reporting, New York: Holt, Rinehart and Winston, 1965.

10. Charnley, op. cit., p. vi.